

Meeting discussions from the 5th meeting of the LRM Standards Committee.  
Wednesday, September 22, 2004  
*notes by Erik Hubl*

Attendance: Larry Zink, Jim Koch, Bill Sheldon, Dan Silvis, Jim Langtry, Erik Hubl

Both John Beran and Gail Knapp were absent.

The meeting began at 1:04 PM. There were no corrections to the minutes. Larry provided us with an agenda for the meeting. He also prepared a summary sheet of the proposed standards for discussion. We began by reviewing those draft revised standards.

Under the Geodetic Control section:

- A. This draft standard describes the **datum** to be used. It would be required with or without NLISP funding. Revised wording looks good.
- B. This draft standard describes the **map projection** to be used. It would be required with or without NLISP funding. Erik suggested a slight change to the revised wording.

*The State Plan Coordinate System, NAD83, should be used as the primary map projection system for the recording of positions in local land-data systems in Nebraska. Selection of any other projection system should be done reluctantly and only after most careful consideration.*

(We recognize the capability of existing GIS software to re-project on the fly from a given map projection to State Plane. Also the choice of units in feet or meters becomes moot with existing capabilities). The question was raised on whether we should reference the state plane law as it specifically refers to units of meters. Larry said he would consult with SSO on the issue of units.

Bill suggested that we incorporate a “case study” example that describes Lancaster’s use of a local map projection as there are valid reasons why that approach was taken. Stated simply, distance measurements taken on a state plane projection do not accurately reflect ground measurements.

- C. This draft standard describes the need to connect to the **NSRS (National Spatial Reference System)**. It would only be required with NLISP funding.
- D. This draft standard describes the importance of creating a geodetic reference framework containing the **PLSS (Public Land Survey System)**. It would only be required with NLISP funding. Erik suggested that we remove the reference to the center of section point. In rural portions, this point is not as easily obtained. In developed urban areas, it is more readily obtainable. It was also suggested to change the wording to “...locate and/or re-monument as necessary these points...”
- E. This draft standard describes the **ortho-base (aerial layer)** that should be used with any GIS project. It would be required with or without NLISP funding. The

easy acquisition of a 1993 or a 1999 DOQQ set for any location in Nebraska is the logic behind this requirement. Those digital ortho photo quarter-quads also meet the minimum standard for map scale.

- F. This draft standard describes the minimum **map scale** required and offers suggestions for higher accuracy mapping. It would only be required with NLISP funding.
- G. This paragraph was determined to be more of a salient point than a standard. It describes the need to maintain attribute databases and unique identifiers that connect to PLSS corners, restored survey marks and county boundaries.
- H. This paragraph recommended working with SSO to explore the use of BLM geographic measurement approach. Experience has shown that this program is really more suited to estimating locations on remote federal lands and not in developed areas. Further discussion with SSO is needed.
- I. This paragraph was also determined to be more of a salient point than a standard. It describes the importance of using a surface features basemap (ortho photo) and could be combined with item E.
- J. This paragraph was also determined to be more of a salient point than a standard. It describes the importance of proper geo-positioning of various layers in a GIS. Layers such as floodplains, soils or zoning should be accurately positioned to allow spatial integration with parcels.
- K. This draft standard describes the need for two important base layers; the **Legal Lot layer** and the **Parcel Layer**. Stated simply, ownership parcels can be made up of bits and pieces of legal lots. Both are important in a multi-purpose GIS. It would only be required with NLISP funding. Erik suggested some slight rewording that recognizes the creation of the legal lot layer first and the parcel layer second.

*Two graphic data layers are necessary to provide the foundation for a wide variety of local government GIS/LIS applications. 1.) The legal lot layer consisting of legal land subdivisions. These are aliquot portions of the PLSS, filed subdivision plats and irregular tracts defined by filed deeds. 2.) The parcel layer that defines ownership tracts of land. These tracts may group multiple legal lots into one taxable account and that typically represents the boundaries of a landowner's property. These data layers include locational coordinates for points representing property corners, lines between property corners representing property boundaries and closed polygons representing the property area.*

- L. This draft standard describes a need for a **uniform PIN number** or parcel identifier. It would only be required with NLISP funding. Much discussion centered on this topic. Previous investigation has shown us that there are multiple varieties of parcel identifiers being used throughout the state. It is believed that all varieties could be used in a statewide schema by including a unique county code

at the beginning of each version. Additional discussion took place on the merits of a locational PIN versus a random number. On the topic of parent/child parcel splits, Bill suggested that we clearly state the proper procedure for doing this. It was also suggested that we come up with and promote a common model for any to adopt but that we also allow for any existing structures that are already in place. Larry said he would come up with some draft text.

- M. This draft standard describes the need for related tables of **attribute data** that could be connected to the point, line or polygon features in a GIS. It would only be required with NLISP funding. We are still pursuing the need to obtain database descriptions for DPAT requirements. Bill provided us with a printout of the TerraScan Real Estate Sales Data that he uses. Larry wants to come up with a dataset scheme that meets DPAT needs and then he would like to have other government entities review it for suggestions of any additional useful data items.
- N. This draft standard describes the need to obtain the coordinates for the perimeters of all **county boundaries using GPS**. It would only be required with NLISP funding. We actually discussed this item early on in the discussion and it should be moved up into the geodetic section. It was suggested that we change the wording "...invest in tightly defining the geographic coordinates..." to *"...invest in a precision GPS survey to locate and obtain the geographic coordinates..."* Larry will work on some revised text.

For the next meeting, Larry suggested that we review the sales file attribute list provided to us by Bill and to read through the digital IAAO standards.

Jim K. provided us with a sales file practice manual that is used to instruct county assessors on how to enter property sales information for use by DPAT.

We discussed DPAT JD Edwards proposal to examine this very process and make recommendations. It is highly urged that they work with us. Larry will initiate a dialogue with Cathy.

**Next meeting:** Wed, October 20th, 2004 1:00 PM NDOR